

In the Claims

1-7 (cancelled)

8. (new) A piston accumulator, comprising:

an accumulator housing in a form of a cylindrical tube with first and second working chambers and with a piston stroke area, said cylindrical tube having a wall adjoining said piston stroke area and being a unitary one-piece component of said cylindrical tube;

a piston separating said working chambers from one another and being movable in an axial direction within said piston stroke area;

first and second closing components closing axial ends of said cylindrical tube, said first closing component being formed by shaping a reshaping area of said wall of said cylindrical tube;

a rigid stop element in an interior of said cylindrical tube at a transition point from said piston stroke area to said reshaping area, said stop element restricting movement of said piston before reaching said reshaping area, said stop element being a level plate having a crowned, convex cambered circumferential surface;

a shoulder inside said cylindrical tube supporting and retaining said stop element; and

a concave cambered surface in said cylindrical tube adjacent said shoulder receiving and formed about said circumferential surface of said stop element during deformation of said wall in forming said first closing component to retain positively said stop element in place in said cylindrical tube against axial movement.

9. (new) A piston accumulator according to claim 8 wherein

said level plate has at least one discharge opening allowing fluid flow therethrough.

10. (new) A piston accumulator according to claim 8 wherein

said shoulder forms a level surface abutting a level surface of said level plate adjacent said circumferential surface.

11. (new) A piston accumulator according to claim 8 wherein

said first working chamber is a gas supply space; and

said second working chamber is a hydraulic fluid space.

12. (new) A piston accumulator, comprising:

an accumulator housing in a form of a cylindrical tube with first and second working chambers and with a piston stroke area, said cylindrical tube having a wall adjoining said piston stroke area and being a unitary one-piece component of said cylindrical tube;

a piston separating said working chambers from one another and being movable in an axial direction within said piston stroke area;

first and second closing components closing axial ends of said cylindrical tube, said first closing component being formed by shaping a reshaping area of said wall of said cylindrical tube;

a rigid stop element in an interior of said cylindrical tube at a transition point from said piston stroke area to said reshaping area, said stop element restricting movement of said piston

before reaching said reshaping area, said stop element being an annular element having a crowned, convex cambered circumferential surface;

a shoulder inside said cylindrical tube supporting and retaining said stop element; and

a concave cambered surface in said cylindrical tube adjacent said shoulder receiving and formed about said circumferential surface of said stop element during deformation of said wall in forming said first closing component to retain positively said stop element in place in said cylindrical tube against axial movement.

13. (new) A piston accumulator according to claim 12 wherein

said first working chamber is a gas supply space; and

said second working chamber is a hydraulic fluid space.